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CLAIMS:

What is claimed is:

1.   A method in a data processing system for
5   transferring data, the method comprising:

sending a request, wherein the request includes an
amount of available processing space at the data
processing system; and

receiving a subsequence of data packets from a set
10   of subsequences of data packets in response to the
request each time the amount of available processing
space is free, wherein data within each subsequence
within the set of subsequences of data packets fits
within the amount of available processing space.
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2.   The method of claim 1, wherein the data packets are
management datagrams.

3.   The method of claim 1, wherein a particular
20   subsequence of data packets within the set of
subsequences of data packets has an amount of data less
than the amount of available processing space.

4.   The method of claim 1, wherein a particular data
25   packet within a subsequence includes a fragment flag
indicating whether the particular packet is a first data
packet or a last data packet of a data transfer
operation.

30   5.   The method of claim 1, wherein a particular data
packet is a last data packet within the set of

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subsequences of data packets.

6.   The method of claim 1, wherein each subsequence
within the set of subsequences of data packets has a
5   different amount of data.

7.   The method of claim 1, wherein the data packets
includes a segment number.

10   8.   The method of claim 1 further comprising:
reassembling data within the data packets into a
correct order.

9.   The method of claim 8, wherein each data packet
15   within the set of subsequences of data packets includes a
segment number and wherein the data is reassembled using
the segment number.

10.   The method of claim 1, wherein the amount of
20   available space is a buffer in the data processing
system.

11.   The method of claim 1, wherein the amount of
available processing space is a buffer allocated within a
25   memory in the data processing system.

12.   A method in a data processing system for
transferring data, the method comprising:
receiving a request from a requestor, wherein the
30   request includes an amount of available space;
identifying data using the request;

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placing the data into a plurality of subsequences of data packets, wherein each subsequence within the set of subsequences hold data in an amount less than or equal to the amount of available space; and

5   sending the plurality of subsequences of data packets to the requestor.

13.   The method of claim 12, wherein a first data packet and a last data packet within the plurality of
10   subsequences of data packets includes a payload length.

14.   The method of claim 12, wherein a data packet within the plurality of subsequences of data packets includes a fragment flag to indicate whether the data packet is a
15   first data packet or a last data packet to be sent for a data transfer operation.

15.   The method of claim 12, wherein the sending step comprises:
20   sending an unsent subsequence of data packets within the plurality of subsequences of data packets to the requestor;

monitoring for a reply indicating that the amount of available space is free at the requestor; and
25   responsive to another unsent subsequence of data packets being present within the plurality of data packets and detecting the reply, repeating the sending and monitoring steps.

30   16.   A data processing system comprising:
a bus system;

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a communications unit connected to the bus, wherein data is sent and received using the communications unit;

a memory connected to the bus system, wherein a set of instructions are located in the memory; and

5 a processor unit connected to the bus system, wherein the processor unit executes the set of instructions to send a request, wherein the request includes an amount of available processing space at the data processing system; and receive a subsequence of data

10 packets from a set of data packets in response to the request each time the amount of available processing space is free, wherein data within each subsequence of data packets fits within the amount of available processing space.

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17. The data processing system of claim 16, wherein the bus system includes a primary bus and a secondary bus.

18. The data processing system of claim 16, wherein the

20 processor unit includes a single processor.

19. The data processing system of claim 16, wherein the processor unit includes a plurality of processors.

25 20. The data processing system claim 16, wherein the communications unit is an Ethernet adapter.

21. A data processing system comprising:

a bus system;

30 a communications unit connected to the bus, wherein data is sent and received using the communications unit;

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a memory connected to the bus system, wherein a set
of instructions are located in the memory; and

a processor unit connected to the bus system,
wherein the processor unit executes the set of

5   instructions to receive a request from a requestor,
wherein the request includes an amount of available
space; identify data using the response; place the data
into a plurality of subsequences of data packets, wherein
each subsequence within the set of subsequences holds

10 data in amount less than or equal to the amount of
available space; and send the plurality of subsequences
of data packets to the requestor.

22. A data processing system for transferring data, the
15 data processing system comprising:

sending means for sending a request, wherein the
request includes an amount of available processing space
at the data processing system; and

receiving means for receiving a subsequence of data
20 packets from a set of subsequences of data packets in
response to the request each time the amount of available
processing space is free, wherein data within each
subsequence of data packets fits within the amount of
available processing space.

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23. The data processing system of claim 22, wherein the
data packets are management datagrams.

24. The data processing system of claim 22, wherein a
30 particular data packet within the set of subsequences of
data packets has an amount of data less than the amount

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of available processing space.

25.   The data processing system of claim 22, wherein a
particular data packet in a subsequence includes a
5   fragment flag indicating whether the particular packet is
first data packet or last data packet of a data transfer
operation.

26.   The data processing system of claim 22, wherein the
10   particular data packet is a last data packet within the
set of subsequences of data packets.

27.   The data processing system of claim 22, wherein each
subsequence within the set of subsequences of data
15   packets has a different amount of data.

28.   The data processing system of claim 22, wherein the
data packets includes a segment number.

20   29.   The data processing system of claim 22 further
comprising:
        reassembling means for reassembling data within the
data packets into a correct order.

25   30.   The data processing system of claim 29, wherein each
data packet within the set of subsequences of data
packets includes a segment number and wherein the data is
reassembled using the segment number.

30   31.   The data processing system of claim 22, wherein the
amount of available space is a buffer in the data

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processing system.

32. The data processing system of claim 22, wherein the amount of available processing space is a buffer
5   allocated within a memory in the data processing system.

33. A data processing system for transferring data, the data processing system comprising:
    receiving means for receiving a request from a
10 requestor, wherein the request includes an amount of available space;
    identifying means for identifying data using the response;
    placing means for placing the data into a plurality
15 of subsequences of data packets, wherein each subsequence within the plurality of subsequences of data packets holds data in amount less than or equal to the amount of available space; and
    sending means for sending the plurality of
20 subsequences of data packets to the requestor.

34. The data processing system of claim 33, wherein a first data packet and a last data packet within the plurality of subsequences of data packets includes a
25 payload length.

35. The data processing system of claim 33, wherein a data packet within the plurality of subsequences of data packets includes a fragment flag to indicate whether the
30 data packet is a first data packet or a last data packet to be sent for a data transfer operation.

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36. The data processing system of claim 33, wherein the sending step comprises:

sending means for sending an unsent data packet
5 within the plurality of data packets to the requestor;

monitoring means for monitoring for a reply indicating that the amount of available space is free at the requestor; and

repeating means, responsive to another unsent data
10 packet being present within the plurality of data packets and detecting the reply, for repeating initiation of the sending means and monitoring means.

37. A computer program product in a computer readable
15 medium for use in transferring data in a data processing system, the computer program product comprising:
first instructions for sending a request, wherein the request includes an amount of available processing space at the data processing system; and
20 second instructions for receiving a subsequence of data packets from a set of subsequences of data packets in response to the request each time the amount of available processing space is free, wherein data within each subsequence of data packets fits within the amount
25 of available processing space.

38. A computer program product in a computer readable medium for transferring data in a data processing system, the computer program product comprising:
30 first instructions for receiving a request from a requestor, wherein the request includes an amount of

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available space;

     second instructions for identifying data using the response;

     third instructions for placing the data into a
5 plurality of subsequences of data packets, wherein each subsequence within the set of subsequences holds data in amount less than or equal to the amount of available space; and

     fourth instructions for sending the plurality of
10 subsequences of data packets to the requestor.